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CLAIMS:

We claim:

- A method of color correction, comprising the steps of: sensing an illuminant; and performing color correction for a color output device based on the illuminant.
- The method of claim 1, further comprising the step of:
 driving the color output device with the color correction based on the
 illuminant.
- 3. The method of claim 1, further comprising the step of: adding an illuminant mode based on the illuminant to a color profile for the color output device.
- 4. The method of claim 1, the sensing step comprising the step of:
 sensing the illuminant in a lighting environment where the color output device
 is located.
- 5. The method of claim 1, the sensing step comprising the step of: sensing the illuminant in a lighting environment where an image to be output by the color output device is captured by a color digital camera.
- 6. The method of claim 1, wherein the color output device comprises a color printer.
- 7. The method of claim 1, wherein the color output device comprises a color monitor.
- 20 8. The method of claim 1, wherein the color output device comprises a color digital camera.
 - A color correction system, comprising:
 an illuminant sensor to sense an illuminant; and

color correction software, comprising:

code to perform color correction for a color output device based on the illuminant.

- The color correction system of claim 9, the color correction software furthercomprising:code to read the illuminant sensed by the illuminant sensor.
 - 11. The color correction system of claim 9, the color correction software further comprising:

code to drive the color output device with the color correction based on the illuminant.

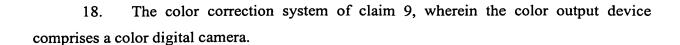
- 12. The color correction system of claim 9, wherein the illuminant sensor is part of the color output device.
- 13. The color correction system of claim 9, the color correction software further comprising:

code to add an illuminant mode based on the illuminant to a color profile for the color output device.

- 14. The color correction system of claim 9, wherein the illuminant sensor senses the illuminant in a lighting environment where the color output device is located.
- 15. The color correction system of claim 9, wherein the illuminant sensor senses the illuminant in a lighting environment where an image to be output by the color output device is captured by a digital camera.
 - 16. The color correction system of claim 9, wherein the color output device comprises a color printer.
- 17. The color correction system of claim 9, wherein the color output device comprises a color monitor.

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- 19. A color correction system, comprising:
 - a means for sensing an illuminant; and
- a means for performing color correction for a computer system based on the illuminant.
- 20. The color correction system of claim 19, further comprising:

a means for printing an image on a color printer of the computer system with the color correction based on the illuminant.

- 21. The color correction system of claim 19, further comprising:
- a means for displaying an image on a color monitor of the computer system with the color correction based on the illuminant.
- 22. A computer system, comprising:
 - a processor;
 - a color output device;
 - an illuminant sensor to sense an illuminant; and
- color correction software executable by the processor to perform color correction for the color output device based on the illuminant.
- 23. The computer system of claim 22, wherein the color output device comprises a color printer.
 - 24. The computer system of claim 22, wherein the color output device comprises a color monitor.
- 25. The computer system of claim 22, wherein the color output device comprises a color digital camera.
- 25 26. A color correction system, comprising:
 - a means for receiving illuminant information representing an illuminant sensed by an illuminant sensor; and

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a means for performing color correction for a color output device based on the illuminant.

- 27. The color correction system of claim 26, wherein the color output device comprises a color printer.
- 5 28. The color correction system of claim 26, wherein the color output device comprises a color monitor.
 - 29. The color correction system of claim 26, wherein the color output device comprises a color digital camera.
 - 30. A method of color correction, comprising the steps of: reading illuminant information and spectral reflectance data associated with a color image; and

performing color correction for the color image based on the illuminant information and the spectral reflectance data.

- 31. The method of claim 30, wherein the illuminant information and the spectral reflectance data are embedded in the color image.
 - 32. The method of claim 30, further comprising the step of:
 receiving the illuminant information, the spectral reflectance data and the
 color image from a web browser.
 - 33. A method of illuminant-based color management, comprising the steps of: sensing an illuminant condition in which a color image is captured by a color digital camera;

detecting spectral reflectance data for an object corresponding to the color image; and

associating the illuminant condition and the spectral reflectance data with the color image.

34. The method of claim 33, the associating step comprising the step of:

embedding the illuminant information and the spectral reflectance data in the color image.